

ABSTRACT OF THE DISCLOSURE

5 An equalizer for processing blocks of data includes  $n - 1$  data shifters,  $n$  finite filters, an adder, and a controller. Each of the  $n - 1$  data shifters shifts the blocks of data. One of the  $n$  finite filters applies a corresponding set of finite filter coefficients to the blocks of data, and each of the other  $n - 1$  finite filters applies a set of finite filter coefficients to a corresponding output of the  $n - 1$  data shifters. Ghosts of the blocks of data are not eliminated as a result of the application of the  $n$  sets of finite filter coefficients corresponding to the  $n$  finite filters, and  $n > 2$ . The adder is arranged to add outputs from the  $n$  finite filters. The controller is arranged to control the sets of finite filter coefficients corresponding to the  $n$  finite filters so that the addition performed by the adder substantially eliminates the ghosts.